(54) DRUG PREPARATION FOR TRANSNASAL ADMINISTRATION HAVING GROWTH HORMONE RELEASING ACTIVITY
(11) 63-303931 (A) (43) 12.12.1988 (19) JP
(21) Appl. No. 62-141896 (22) 5.6.1987
(71) SUMITOMO PHARMACEUT CO LTD (72) AKIHIKO OSADA(3)
(51) Int. Cl⁴. A61K37/43,A61K37/36

PURPOSE: To obtain the titled drug preparation having remarkably improved absorptivity of an active substance through nasal mucosa into blood, exhibiting low local toxicity and stimulation and resistant to decomposition of the active component, by suppressing the osmotic pressure ratio of the aqueous solution of the active substance below a specific level.

CONSTITUTION: The titled drug preparation having improved absorptivity of an active substance through the nasal mucosa into blood, exhibiting effective activity to release growth hormone at a low rate of administration without accompanying harmful reaction and able to be easily administered can be produced by suppressing the osmotic pressure ratio of an aqueous solution of the active substance to ≦1 (preferably 0.3～0.1). The osmotic pressure ratio is a relative ratio to physiological osmotic pressure and the content of the active substance in the drug preparation is preferably 0.01～10W/V% in aqueous solution. The above drug preparation can be prepared by mixing and dissolving necessary components in distilled water and adjusting to a prescribed osmotic pressure ratio. It can be converted to a powdery preparation to be dissolved before using e.g. by freeze-drying.

(54) PRODUCTION OF 4-METHYL-1-PENTENE
(11) 63-303932 (A) (43) 12.12.1988 (19) JP
(21) Appl. No. 62-141151 (22) 4.6.1987
(71) SUMITOMO CHEM CO LTD (72) TAKAO HIBI(1)
(51) Int. Cl⁴. C07C11/113,B01J27/232,C07C2/24,C07C2/26

PURPOSE: To obtain the titled substance by dimerizing propylene in the presence of a catalyst produced by supporting an alkali metal on anhydrous potassium carbonate carrier and treating the product with specific alcohols, phenols, etc.

CONSTITUTION: The titled substance can be produced with little by-production of 4-methyl-2-pentene, by carrying out dimerization reaction of propylene at 100～200°C and 30～200kg/cm² pressure for 2～5hr using a catalyst produced by supporting an alkali metal on anhydrous potassium carbonate carrier and treating the supported product with a specific compound. The supporting is preferably carried out by stirring an anhydrous potassium carbonate carrier and 1～5wt.% of an alkali metal (based on the carrier) at a melting temperature of the alkali metal. The objective catalyst is produced by treating the supported product with a compound selected from 1～10C alcohols, 6～10C phenols, 3～30C amines, 2～20C ethers and 3～20C ketones. The titled substance is useful e.g. as a raw material for heat-resistant polymer.

(54) PRODUCTION OF CUMENE
(11) 63-303933 (A) (43) 12.12.1988 (19) JP
(21) Appl. No. 62-140691 (22) 4.6.1987
(71) SHINDAIKIYOUWA SEKIYU KAGAKU K.K.
(72) KATSUHIKO YAMASHITA(3)
(51) Int. Cl⁴. C07C15/085,B01J21/16,B01J29/06,B01J29/18,C07C2/66,C07C7/04

PURPOSE: To obtain cumene having improved quality, by producing crude cumene from benzene and propylene, contacting the crude product with a solid acidic substance to convert existing unsaturated compounds into high-boiling hydrocarbons and separating and removing the hydrocarbons by distillation.

CONSTITUTION: Benzene is made to react with propylene in the presence of a phosphoric acid catalyst, a Friedel-Crafts catalyst, etc. The obtained crude cumene is made to contact with a solid acidic substance at ≦130°C (preferably 50～120°C) to convert the existing unsaturated compounds into high-boiling hydrocarbons, which are separated and removed by distillation to obtain high-quality cumene. The solid acidic substance is preferably those containing ≧0.15meq/g of a solid acid having an acid strength PKa of +3.3 and is e.g. China clay or zeolite, especially preferably activated clay produce by treating an acid clay with sulfuric acid. Cumene is useful as a production intermediate for synthetic polymer, surfactant, pharmaceuticals, agricultural chemicals, etc.